

**LISTING OF THE CLAIMS:**

1. (Currently Amended) A system embodied in a computer readable medium for building software use cases and related state diagrams for business requirements, the system comprising:

a business activity model identifying a plurality of business activities, the business activity model ~~operable to maintain~~ maintaining a hierarchical relationship between ~~at least some of~~ the plurality of business activities, wherein the hierarchical relationship includes a first number of levels, and wherein each of the plurality of business activities corresponds to one of the first number of levels;

~~a modeling tool operable to build software uses case based on a business requirement, the modeling tool further operable to maintain relationships between at least some of the plurality of software use cases, at least some of the plurality of business activities, and a business requirement;~~

an integration component in communication with the business activity model and the modeling tool, the integration component ~~operable to map~~ mapping ~~at least some of the plurality of business activities from use cases in the modeling tool according to the hierarchical relationship of the business activities maintained by the business activity model~~ to a software use case hierarchical relationship, wherein the software use case hierarchical relationship includes a plurality of software uses case levels, and wherein each of the plurality of business activities corresponds to one of the plurality of software use case levels;

a modeling tool building a software use case based on a business requirement by selecting a first set of the plurality of business activities mapped to at least one of the

plurality of software use case levels;

a graphical user interface ~~operable to illustrate~~ illustrating the software use case hierarchical relationship of at least some of the first set of selected software uses ~~eases business activities with the business requirement;~~ and

a state diagram component ~~operable using the modeling tool, with the mapped use cases~~ to prepare the state diagram component building a state activity diagrams diagram for at least a portion of the business requirement by selecting a second set of the plurality of business activities mapped to at least one of the plurality of software use case levels, wherein the state activity diagram displays the second set of selected business activities as a directionally linked sequence.

2. (Currently Amended) The system of Claim 1 wherein the business activity model aligns the plurality of business activities to a plurality of business domains ~~and identifies each of the plurality of business activities to be a high level, a middle level, or a low level business activity.~~

3. (Currently Amended) The system of Claim 1 wherein the modeling tool is defined to be ~~the IBM Rational Rose~~ a computer aided software engineering tool.

4. (Currently Amended) The system of Claim 1 wherein the integration component is ~~further operable to provide~~ provides a list of the plurality of business activities selectable for building a state activity diagram.

5. (Currently Amended) The system of Claim 1 wherein the business activity model is based on the ~~Tele-Management Forum enhanced Telecom Operations Map (eTOM)~~ a business process model that identifies business activity domains and business activities observed by telecommunications companies.

6. (Original) The system of Claim 5 wherein the business activity model is stored in a spreadsheet file.

7. (Currently Amended) The system of Claim 6 wherein the first number of levels ~~hierarchical relationship of the plurality of business activities is~~ are further defined as ~~an eTOM a~~ level 0 of the business process model, an eTOM a level 1 of the business process model, an eTOM a level 2 of the business process model, and an eTOM a level 3 of the business process model.

8. (Currently Amended) The system of Claim 7 wherein the plurality of software use cases are further defined as ~~one of~~ a scope use case level, a process use case level, and a system integration use case level, and wherein the integration component ~~aligns~~ maps the plurality of business activities corresponding to the level 0 to the scope use cases case level to the eTOM level-0, at least some of the plurality of business activities corresponding to the level 1 and the level 2 to the process use cases case level to the eTOM level-1 and eTOM level-2, and at least some of the plurality of business activities corresponding to the level 2 and the level 3 to the system integration use cases case level to the eTOM level-2 and eTOM level-3 in the modeling tool.

9. (Currently Amended) The system of Claim 8 wherein the at least some of the plurality of business activities in the process use ~~eases~~ case level represent functionality of a business process based on a functional requirement of the business requirement.

10. (Currently Amended) The system of Claim 8 wherein the plurality of business activities in the scope use ~~eases~~ case level represent a project scope based on the business requirement.

11. (Currently Amended) A method for building a state activity diagram, comprising:
- providing a business activity model enumerating domains of a business and a plurality of business activities, the business activity model maintaining a hierarchical association of the plurality of business activities, wherein the hierarchical association includes a first number of levels, and wherein each of the plurality of business activities corresponds to one of the first number of levels;
- ~~segmenting a plurality of use cases according to~~ mapping the plurality of business activities from the hierarchical relation association to a use case hierarchical association, wherein the use case hierarchical association includes a ~~of the~~ plurality of use cases case levels, and wherein ~~with each of~~ the plurality of business activities correspond with one of the plurality of use case levels; ~~the plurality of use cases based on a business requirement;~~
- selecting at least one of the plurality of use-cases business activities mapped to at least one of the plurality of software use case levels; and
- displaying the use-case selected business activities in a state activity diagram, the state activity diagram providing a first selected business activity portion of the use case associated with a first domain of the business and a second selected business activity portion of the use case associated with a second domain of the business, wherein the state activity diagram displays the selected business activities as a directionally linked sequence.

12. (Currently Amended) The method of Claim 11 wherein the business activity model is based on ~~the Tele-Management Forum enhanced Telecom Operations Map (eTOM)~~ a business process model that identifies business activity domains and business activities observed by telecommunications companies.

13. (Currently Amended) The method of Claim 11 wherein the use cases are mapped according to one of a ~~plurality~~ the first number of levels of ~~the eTOM~~ a business process model that identifies business activity domains and business activities observed by telecommunications companies.

14. (Currently Amended) The method of ~~Claim 13~~ Claim 11 wherein ~~the plurality of use case levels includes a business scope use case level, a business process use case level, and a system integration use case level, and~~ wherein the ~~use-cases~~ selected business activities ~~include are mapped to~~ at least one of a the business scope use case level based on the business requirement, a the business process use case level based on functional requirements of the business requirement, and a the system integration use case level based on system requirements of the business requirement.

15. (Currently Amended) The method of Claim 14 further comprising:

providing a system diagram model related to the system integration use case level;

providing a functional diagram model related to the business process use case level;

using at least a portion of the system diagram model to model the state activity ~~diagrams~~  
diagram for at the system integration use ~~eases~~ case level; and

using at least a portion of the functional diagram model to model the state activity  
~~diagrams~~ diagram for at the business process use ~~eases~~ case level.

## 16. (Currently Amended) A method for building a software use case, comprising:

providing a business activity model enumerating a plurality of business activities, wherein there is a hierarchical relationship between the plurality of business activities that includes a first number of levels, and wherein each of the plurality of business activities corresponds to one of the first number of levels;

~~selecting a first business activity from the plurality of business activities;~~

~~defining a plurality of software use cases based on a business requirement;~~

providing an integration component ~~operable to selectively organize~~ mapping, in a modeling tool, the plurality of software use cases business activities from the hierarchical relationship according to a software use case the hierarchical relationship of each of the wherein the software use case hierarchical relationship includes a plurality of software use cases case levels, and wherein each of with the plurality of business activities corresponds to one of the plurality of software use case levels; and

selecting at least one of the plurality of business activities mapped to at least one of the plurality of software use case levels.

~~using the modeling tool to build software uses cases according to the business activity model.~~



17. (Currently Amended) The method of Claim 16 wherein the business activity model aligns the plurality of business activities according to domains of a business, ~~and wherein the plurality of business activities are selected from the group consisting of high level business activities, middle level business activities, and low level business activities.~~

18. (Currently Amended) The method of Claim 17 wherein ~~each of the~~ plurality of software use cases ~~case levels~~ is include a high level software use case level, a middle level software use case level, or and a low level software use case level, and wherein a the plurality of business activities mapped to the high level software use case level comprises ~~one or more at least one of~~ the plurality of business activities mapped to the middle level software use ~~eases case level~~, and wherein a the at least one of the plurality of business activities mapped to the middle level software use case level comprises ~~one or more at least one of the plurality of business activities mapped to the~~ low level software use ~~eases case level~~.

19. (Currently Amended) The method of Claim 16 wherein the business activity model is based on ~~the Tele-Management Forum enhanced Telecom Operations Map (eTOM)~~ a business process model that identifies business activity domains and business activities observed by telecommunications companies.

20. (Currently Amended) The method of Claim 19 wherein the integration component is operable to organize each of the plurality of use cases according to the one of a plurality of levels of ~~eTOM~~ the business process model.